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Triangulation of Methods in Labour Studies in Nigeria: Reflections on the Benefits and Challenges

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Abstract

One of the distinctive aspects of social science research in Nigeria as in other parts of the world is the desire to ensure that procedures followed in a study are scientific so that findings can be replicated and generalized. This has made some social scientists to adopt exclusively a quantitative method in their investigations while relegating qualitative methods to the background. In labour studies, adopting only quantitative method to studying workers does not always tell the full story about the workers, rather it de-contextualizes the study. This paper examines critically the utility and the challenges of triangulating quantitative and qualitative methods in labour studies in Nigeria. It argues that triangulating methods not only closes methodological gaps but gives workers a voice as part of way of promoting international best practices in research and scholarship in the contemporary social science research. The paper concludes that in as much as triangulation of methods is desirable in labour studies, however, it will not substitute for validity resulting from appropriateness, thoroughness and effectiveness with which methods are applied.

Key words: Labour studies, triangulation of methods, questionnaire, in-depth interview, social research.

Introduction

In Nigeria, labour research is one of the most important aspects of social research in most Nigeria universities. This underscores the importance of labour in every human society. It has been argued by various scholars that among the factors of production, labour is the only resource that is capable coordinating and managing other factors of production such as capital, land and material. In essence, human resource is perhaps the most valuable of all other factors of production (Nwachukwu, 1988; Okoh, 1998).

The interest of scholars in labour research dates back to 1940s and 1950s when the organised labour confronted the colonial government because of some discriminatory practices perpetuated by the colonialists; labour later became a springboard which spearheaded the Nigeria's independence in the late 1960. Also, labour even in post-colonial Nigeria had been known to have given the successive military regimes and their civilian collaborators tough times by opposing unfair labour practices in their various places of work and protesting against the adoption of neo-liberal policies that have impoverished and pauperized the Nigerian workers and other vulnerable groups since the mid-1980s. Hence, notable scholars in industrial and labour relations, industrial sociology, labour economics and organisational studies have over the years examined critically the various aspects and segments of labour contestations, struggles and workplace relations. These scholars and many others have engaged in active empirical labour studies using varieties of social science research methods which in the recent time have been waning among young scholars in Nigeria. This brings to the fore the issue of the utility of triangulating quantitative and qualitative methods in labour studies in Nigeria.

In social sciences, efforts are made to make studies truly scientific by applying methods that will make it look so. Usually, quantitative methods are used in this regard while qualitative methods are sometimes relegated to the background. Where only quantitative method is adopted in labour studies, the obvious shortcoming is that a methodological gap is created and which needs to be filled by adopting a complementary method that will give workers a voice. For instance, if workers perceptions, reactions and responses to neo-liberal policies in Nigeria are to be empirically captured, it will require a

triangulation of methods that will properly and adequately contextualize the study. Against this background, this paper attempts to examine critically the utility and challenges of triangulating quantitative and qualitative methods in labour studies in Nigeria.

Overview of quantitative versus qualitative methods in labour studies

Most times in social sciences, the research methods fall into two categories – the quantitative and qualitative methods. Historically, the social sciences have followed the methods and techniques used in studying natural sciences, like biology, chemistry and physics. The founding fathers of sociology had attempted to apply this method in studying social society and social interactions in human society. To these scholars, the explanation of human behaviour and the society at large should be based on the methods or principles of the physical sciences. These principles are designed to maintain and ensure objectivity through standardizing social phenomena, hypothesizing social relationship, established causes and effects, making rooms for generalization of findings and the formulation of general laws (Hughes, Sharrock & Martins, 2003; Ogumbameru, 2004; Okafor, 2005; Okakwu, 2005).

Therefore, quantitative methods in sociology are methods of data (information) collection that fit the aforementioned principles by ensuring that social events are measurable to enable social scientists formulate hypotheses and make necessary generalizations. For success, these principles of quantitative methods rely on survey design that collects large amount of information from many respondents (people) through standardized instruments. Quantitative data collected through standardized instruments can either be primary or secondary data. Primary data are information that are gathered directly by the researcher from respondents, sub-groups and organizations while secondary data are information that have been collected and used, which the researcher finds valuable for the examination of similar social event. Examples of secondary data which may be used for labour research are data from the National Bureau of Statistics, International Labour Organisation (ILO), United Nations Development Programme (UNDP), Federal Office of Statistics (FOS), Central Bank of Nigeria and other official sources. Usually in labour research, primary quantitative data could be collected through the questionnaire while secondary quantitative data can be collected through the document review or study.

Questionnaire which is the main instrument for collection of primary quantitative data may contain closed ended questions, open-ended questions or both to produce robust responses. The close ended questions are questions that do not allow respondents to express themselves the way they may wish. A labour researcher using close ended questions limits the respondents to the listed options in the questionnaire. Closed ended question limits respondent's expression in that it fails to make provision for response. In most instances, the questionnaire can be designed in form of binary questions that can be answered by a "Yes" or "No" response. Depending on nature of labour investigation, the Likert Scale of Rating, which requires a respondent to answer "Strongly Disagreed", "Disagree", "Undecided", "Agreed" and "Strongly Agreed" may be used. Also, values ranging from 0 and 4 may be assigned to the options above to determine the strength of the respondents' responses. Although closed ended questions usually restrict respondents' answers to researcher's categories or options, its strength lies in its standardization of response. This helps in comparisons of workers or groups for instance and it makes coding and analysis of data easier for a researcher (Ogunbameru, 2006; Osiki, 2006).

On the other hand, open-ended questions or free response questions are designed to enable respondents think freely and give their opinion without being restricted to researcher's readymade options. An example of open-ended or free response question is: *How has government's most recent deregulation of petroleum sector affected your daily transportation to your place of work?* In this case the respondent can express himself freely without having to guess or be influenced by the researcher's options. The strength of open-ended question is that it allows the respondents to answer freely and also in all details as he wishes. Its main weakness is that data generated through it are not standardized, thus making comparison of workers or groups' response relatively difficult to manage and analyse. However, through the use of pre-test pilot study, some shortcomings of questionnaire whether close ended or open-ended can be minimized (Ogunbameru, 2004; Okakwu, 2005; Osiki, 2006).

Essentially, pre-test or pilot study is the administration of research instruments (like questionnaire) to a group that has similar characteristics with people intended to study in order to identify likely problems respondents might experience in answering questions in the research instruments. The identified problems are properly addressed with simpler language that

respondents can understand. This enhances quality of information generated through the instruments.

On the whole the notable advantages of quantitative methods include; it makes random sampling possible, relatively rapid, uses statistical analysis, more easily replicated, few collector bias and makes generalization possible. On the other hand, the main disadvantages include; it give only little room for cross checking, it reports ideal behaviour, does not give room for rapport and observation, difficult in dealing with sensitive issues/ topic and limits subjects to pre-selected questions (Scrimshaw, 1991; Babbie, 1989; Isiugo-Abanihe, 2002; Ogunbameru, 2004).

In labour studies, whatever data collected from the workers or groups have little or no meaning if they are not adequately analyzed through the use of appropriate methods and statistical tools. Usually, before quantitative data are analyzed, they are first cleaned, edited and coded. Data coding is the assigning of numbers to different responses such that every answer in the instrument is represented with a figure that has meaning. The meanings of the numbers assigned to questions are found in the coding manual. However, some quantitative instruments are pre-coded such that data are transferred directly to the computer without coding. Recently, in labour research, the Statistical Package for Social Sciences (SPSS) is a computer package commonly used to analyze coded or pre-coded instruments (Bamiro, Oluleye & Tiamiyu, 2006). Also, depending on the specific objectives and nature of labour research, quantitative data may be analyzed any or all of the three types namely; univariate, bivariate, and multivariate analyses. Univariate analysis involves the analysis of one variable at the same time and commonly descriptive statistics that used in this type of quantitative analysis are frequency counts, percentage, mean, median, variance, and standard deviation. Moreover, bivariate analyses involve analysis of two variables (independent and dependent variables) at the same time usually through cross tabulations in order to describe the association or relationship between two variables. Commonly used statistical tools in this type of analysis are *T-test*, *chi-square test* and *correlation*. While, the finally, multivariate analysis is used to examine the relationship occurring in more than two variables and commonly used statistical tools in this type of quantitative analysis are Analysis of variance (ANOVA) and multiple regressions (Babbie, 1989; Ogunbameru, 2004; Okakwu, 2005).

As regards qualitative methods, it is on record that social scientists have in the past embraced qualitative methods of data collections as a result of limitations of positivism (quantitative methods) to properly account for the multiple social crises confronting the various sectors of human society (Ogunbameru, 2004; Isiugo-Abanihe and Obono, 2002). Qualitative techniques of data collection are oriented towards collecting and analyzing real data in local context, starting from people's expressions and subjective interpretations of social situations in their local contexts. In labour research, unlike quantitative techniques of data collection that measure social events, test hypotheses, and make generalization based on standardized instruments, (which may dehumanize, de-animate, de-vitalize human interactions) qualitative methods are openly designed to accommodate the complexity of a phenomenon under investigation. It achieves this by focusing attention on the individual's subjective interpretation of social environment (Babbie, 1989; Bryman, 1996; Creswell, 2002).

Qualitative methods of data collection generate two kinds of data. The first is verbal data collected through any of the following: In-depth Interviews (IDI), life histories, Key Informants Interviews (KII) and Focus Group Discussions (FGDs). Essentially, Focus Group Discussion has the additional advantage of being used in collecting data that are not verbal, but manifest through mimesis – the use of action or body movement to express feelings, beliefs and attitudes without using words.

Besides verbal data, another kind of qualitative data that may be gathered are visual data. This kind of data could be gathered through any of the following: observations, photos and film recording. Verbal and visual qualitative data can be collected as primary and secondary data. Just like quantitative data, qualitative data can be collected as primary or secondary data (Denzin, & Lincoln, 1994; Frankfort-Nachmias & Nachmias, 1996; Jegede, 2006).

Briefly, In-depth interview (IDI) as a verbal method of collecting information is a semi-structure interview with open-ended questions that enables the investigator to probe deep into the breath and width of an issue as conversation proceeds. Sometimes, questions may be asked systematically to allow conversation flow smoothly only to be interrupted if it is necessary for the investigator to probe into new issues raised by the interviewee.

The Key Informant Interview (KII) on the other hand, is similar to the in-depth interview but different in that the informant is one who gives vital information about a group, sub-culture or a particular custom, which the researcher has limited access to either because of language barrier or the peculiar nature of an event.

Moreover, Life histories allow the researcher to approach the respondent's experiential world in a more comprehensible way. The respondent is asked to present the history of an event in which the respondent participated. The investigator's role is to make the respondent tell the story that relates to the specific objectives of the study as comprehensive as possible. Whereas life history is based on the biographical data as narrated by the respondent, Focus Group Discussion (FGD) is the explicit use of group interaction to produce verbal and non-verbal data that would be less accessible without the interaction found in group. It comprises between 8 and 10 persons of relatively same characteristics – homogeneous group, a note taker and a moderator/facilitator. The success of FGDs depends greatly on the role of the moderator. That is how the moderator is able to steer the dynamics of interaction by reflecting on the topic, asking provocative questions, polarizing slow discussion or accommodating dominant discussant to produce both verbal and mimesis data that may enhance findings of the study. It is important to note that FGD is limited in collecting visual data because its application is restricted to group setting (Isiugo-Abanihe & Obono, 2002). Visual data are very important because listening and taking notes through interviews may conceal facts that may give clues to how and why actors act the way they do. Besides, visual information may assist investigator(s) design programmes for intervention from which communities and groups will benefit (Babbie, 1989).

Observation is the oldest method of qualitative (visual) data collection. According to Flick (1992) this can be classified into five dimensions. These include;

- covert versus overt observation: how far the observation is revealed to those that are observed?;
- non-participant versus participant observation: how far does the observer become active part of the observed field?;

- systematic versus unsystematic observation: is a more or less standardized observation scheme applied or does the observation remain rather flexible and responsive to the process themselves?;
- observation in natural versus artificial situation: are observation done in the field of interest or interaction 'moved' to a special place like laboratory? and,
- self-observation versus observing others: mostly other people are observed, so how is attention paid to investigator's reflexive self-observation?

Labour researchers sometimes collect and document social actions in form of photos and films, which are collected with cameras. The advantage of using visual means such as a camera to collect visual data is that information collected are recorded exactly the way they occurred. Data collected through visual means also enable the researcher to document social actions that are too fast to be collected through other forms of data collection and such data can be transferred without losing their contents.

In labour studies, qualitative data collection either through verbal and visual means are analyzed through many ways. One of the most popular is the *content* analysis. Before content analysis is done, raw data from field are first transcribed into text, which is the basis for the actual analysis. This is because information from the field may be collected through audio cassette and videos and can be in different languages and not well organized. Sometimes it is after transcribing to text that generated information begin to make much meaning and are easy to interpret. Interpreting the text by the researcher involves vital decision making about which information is relevant and which is not relevant. The process of eliminating and selecting text that are more relevant involves three stages. These include: open coding, axial coding, selective coding. In brief, coding in qualitative data is different from the coding of quantitative data mentioned earlier. This refers to the ways the researcher handles text (i.e. transcribed data) to enable him separate different concepts, ideas, opinions or views of respondents and to reorganize them to more meaningful forms. According to Ogunbameru (2004) coding qualitative data involves constant comparison of phenomena, cases, concepts and the examination of questions which are raised and addressed by the respondents. Open coding occurs when there is grouping of ideas and concepts from text to either single words or short sentences. Usually several

words and short sentences emerge from **open** coding that may require further classification. Furthermore, the summarizing of multiple ideas, views or opinion and concepts from open coding to more meaningful sentences or words to suit research objectives is called axial coding. Also, selective coding is the elaboration and integration of the core concepts and ideas from axial coding to describe the event under study (Okakwu, 2005; Jegede, 2006).

The three coding procedures described above all produce small units of materials that can be analyzed through content analysis techniques, which include: summary content analysis, explicative content analysis and structure content analysis. In brief, summary content analysis involves the elimination of passages or repeated phrases that add little or nothing to the information gathered.

Moreover, explicative content analysis operates in the opposite direction by explaining in details ambiguous concepts which respondents used to express their ideas, views or opinions.

Structure content analysis on the other hand examines the patterns (structure) of arguments or expressions of respondents classify and interpret their responses according to the specific objectives of the study. Besides, content analysis, another method of analysis of qualitative data in labour studies is verbatim quotations and narratives. The former involves careful verbatim report of statements made the respondents without adding or removing anything. In this way, the researcher wants to report one or more views or opinions made by the respondents in order to support his argument. Narratives are usually used to report case studies to buttress what is unique about a particular respondent or respondents (Denzin & Lincoln, 1994; Bryman, 1996).

In summary, qualitative method has the following advantages. These include:

- it gives room for cross checking,
- it gives opportunity to identify real versus ideal behaviour,
- can be used to explore sensitive issues/topics,
- gives room for observation,
- gives subjects voice and vitality.

However, its shortcomings include:

- it takes time,
- random sampling is not possible,
- there is problem of generalization because only few subjects is selected,
- presents problem of replication, and
- does not give room for statistical testing (Scrimshaw, 1991; Isiugo-Abanihe, 2002; Ogunbameru, 2004).

Obviously, the two basic methods used in collecting and analyzing data in labour studies, have benefits and shortcomings. The implication is that no single method is adequate enough to address complex issues relating to labour studies. It is in an attempt to address these issues that labour researchers are adopting triangulation of method to collect and analyze data so as to cushion the shortcomings of using only a method.

Benefits and challenges of triangulating quantitative and qualitative methods in labour studies

In its simplest meaning, triangulation means combination or mixing of more than one particular thing in the process of a research in order to achieve a robust result. Also, triangulation can be defined as mixing data or methods so that diverse viewpoints or standpoints can cast light upon an issue under investigation. According to Olsen (2004) the mixing of data types, known as triangulation, is often thought to help in validating claims that might arise from an initial pilot study. The mixing of methodologies for instance, mixing the use of survey data with oral interview is a more profound form of triangulation. For some scholars, triangulation may be conceived as an attempt to find a middle ground and reconcile the positivist and rationalist scholars, realist and idealist scholars, and the issues of objectivity and subjectivity that have polarized sociologists for a long time (Tashakkori & Teddlie, 1998; Creswell, 2002; Hughes et al, 2003).

Though, Denzin (1970; 1978; 1989) was credited to have first used the term ‘triangulation’ as a robust way of making research holistic and robust for validation and confirmation of conclusion, however, there are ample evidences to show that scholars have been using mixed methods in their investigation even before Denzin coined the term. For these scholars there is nothing new about triangulation since studies have been mixing methods in

empirical studies. First, for instance, Olsen (2004) argued that Lenin used a mixture of quantitative data tables along with a political-economy analysis of charged words in his classical research monograph, *The Development of Capitalism in Russia* (1898). Second, there is also an argument that every quantitative study (that is, the use of questionnaire) proceeds from the qualitative study (that is, the review of literature). Therefore the argument is that without thorough review of literature no meaningful questionnaire can be constructed.

For Bazeley (2004), triangulation is the term which has been greatly misused in relation to both purpose and design since Denzin (1970, 1978 & 1989) popularized it without recourse to either to the condition inherent in the original concept. According to her, Denzin originally conceived triangulation as a the conduct of parallel (or otherwise) duplicated) studies using different methods to achieve the same purpose with a view to providing corroborating evidence for conclusion drawn, that is, used as a technique of validation. In any case in triangulation has gone beyond Denzin because in the manner it is being used present, it does not assist validation as each method is understood on its own terms (Flick, 1992). Hence, it is only method that being triangulated today, even with a particular method, instruments can be triangulated, giving rise to triangulation of data and theories as well.

However, no matter how the term has been viewed and used, it has become a recurring concept in social research lexicon. Hence, triangulation of methods has been widely applied to various fields of sociology including, criminology, demography, medical sociology, development studies and industrial and labour studies. In labour studies where instruments, methods and data have been appropriately triangulated to investigate some labour issues such as labour contestations and resistance under the debilitating neo-liberal policies and globalisation, labour adjustments to worsening socio-economic living conditions as well labour survival in informal sector in Nigeria (Okafor, 1998; Onyeonoru, 2004; Adenugba, 2006; Akinwale, 2009).

In labour studies triangulation can yield the following benefits:

Triangulation generates robust and rich data. Data is the soul of every research endeavour. And for data to make sense, they must be robust and rich. A rich and robust data are data that capture comprehensively the major and specific objectives of the study. In labour studies when instruments and

method are appropriately triangulation, they will yield robust and rich data that will meet the objectives of the study and may give rooms for generalizations and prediction. In essence it helps to make study scholarly and informative.

Triangulation sharpens the research skills of labour researchers. In labour studies, a scholar who triangulates his methods is only demonstrating the research skills he possesses. In other words, he is demonstrating that he has a research skill that can stand the test of time. Since social events are dynamic, labour researchers are also dynamic not only in the knowledge they possess but also in research skills they possess. Therefore, the triangulations of methods enable a researcher to capture labour holistically instead of partially.

Triangulation gives workers a voice. One of main shortcomings of using only quantitative methods in labour studies, it that it dehumanizes workers, denies them a voice, devitalizes them and removes them from social realities of industries and the larger society. Through triangulation of research instruments workers are given opportunity to express themselves on how they feel about their jobs, work conditions and how external pressures are impinging on their work.

Triangulation presents labour issues holistically. Triangulating quantitative and qualitative methods in labour studies enable labour issues to be presented holistically. That is, some issues that may be over looked by more method could be complemented with another method. Usually workers who work in industries come from a particular socio-cultural milieu. Most often these socio-cultural issues shape their attitude and behaviour in the workplace and cannot be captured statistically. Hence it makes sense to adopt a method that complement what cannot be captured statistically and give vitality to their voice.

Triangulation enhances academic excellence and global competitiveness. Knowledge is dynamic and scholars are expected to move this trend. When Nigerian labour researchers adopt triangulation of methods in presenting labour contestations over some obnoxious and debilitating neo-liberal policies, for example, they are adding value to their academic excellence and making themselves competitive in the global arena. All over the world scholarship is judged by the dynamics of researchers in the currents trends in research.

Despite the above benefits evident in the triangulation of both quantitative and qualitative methods in labour studies especially in Nigeria, there are some obvious challenges that may limit the ability of labour researchers to triangulate the methods. These challenges bother on;

Challenge of poor research design. When the statement of the problem is properly problematized, the gap in knowledge which the research intends to fill will be elusive. This gives rise to poor conceptualization research design. A research design simply put is an advance plan or a blueprint for collection and analysis of method. This is the foundation or the main building block of every research. Hence, a poor research design will not produce any robust data even if the research attempts to triangulate both methods. Hence, the whole essence of the research is misplaced.

Challenge of appropriate research skills to manage large data generated. A labour research scholar who has no appropriate research skill will hardly appreciate triangulation of methods in labour studies especially qualitative data. For this kind of research he may wish to do a 'soft research' that will involve only quantitative method, for instance, hoping that use of statistics make his study more scientific. If a labour researcher lacks appropriate skill, he not be able handle large data that may generated through qualitative methods.

Challenge of poor knowledge and application of qualitative instruments. Sometimes labour researcher lack proper knowledge of qualitative instruments and therefore attempts to apply them arbitrary in studies. It is important to emphasis each instrument of qualitative method is unique and more appropriate to study a particular issue than other instruments. For instance, if a researcher fails to see the connection between statement of the problem and research objectives and research design, he may not adopt appropriate instrument to instigate the issue on hand. For instance, qualitative instruments such as Observation, In-depth Interview (IDI), Key Informant Interview (KII), Focus Group Discussions (FGDs), Case Studies are each better suited to study a particular issue confronting workers that other instruments. They are not used arbitrary and blindly to generate qualitative data. The instrument(s) to be used must appropriate to the gap sought to be filled, research objective and research design.

Challenge of time and funds. The constraints of time and funds may be a major and challenge to triangulation of quantitative and qualitative methods

in labour studies. Time and funds are of essence in collecting and analyzing data in any labour study (Ekhaguere, Olayinka, Taiwo, Alonge, & Obono, 2006). This is because both methods may be used simultaneously but rather one after another. For instance, a researcher who is interested in triangulating both methods any wish to start with quantitative methods and depending on how the respondents filled the questionnaire distributed to will raise some questions for in-depth interview and vice versa. Sometimes, a research may wish to engage the services of research assistants to be beat time, but even with this if he has no time to supervise their activities and operations, data they may generate may not be useful. Also, where a researcher lacks adequate funds to carry out research, the beauty of triangulation may be lacking in labour study.

Challenge of ethical issues. Ethical issues are very important in any research endeavour. These ethical issues centre on anonymity, confidentiality, beneficence and voluntarism and informed consent (Obono, Arowojolu, Ajuwon, Ogundipe, Yakubu & Falusi, 2006). The idea here is that where a research fails to protect the identity of respondents and treat information given to him in trust with sense of confidentiality, the respondents may be exposed to possible harms and vulnerability. This limits the application of triangulation of methods in labour research. In using verbatim quotations to report qualitative data, some labour researchers fail to use pseudonyms to protect the identity of the respondents especially vulnerable groups like migrants workers, casual and contract workers and as well as child labourers.

Reflections and discussions

Having being a teacher, a project/dissertation/thesis supervisor and a researcher for close to a decade and half, and reflecting on the nature and future of labour research in Nigeria, one is concerned about the narrowness of the methods being used by scholars and students of industrial and labour studies. In most cases, scholars and students are inclined to publishing research findings that used one kind of method: quantitative, questionnaire-based research. The occasional departure from questionnaire-based research tends also to be shallow and shabbily done. Granted, some of these research findings have their merits and values, and there is a place for quantitative research in the repertoire of methods to be used in studying workers and social realities of industry. What one may object to is the nearly exclusive use of solely quantitative methods in studying industrial workers. Of course,

the emphasis on quantitative methods is hardly restricted to labour research. Quantitative methods are the dominant approach in the social sciences generally, including the disciplines in which most labour research takes place. In social sciences, quantitative methods are used because quantification is part of the scientific method. Quantification provides data that can be used to establish patterns, compare groups, investigate sources of variation, and conduct statistical analyses. What is often gained from quantification is clear. However, when the methods used in labour research are exclusively quantitative, something is lost as well. The unfortunate fact is that reducing workers' lives to mere numbers often drains them of their vitality and voice. The scientific credibility conferred by quantification is often pursued with such single-minded intensity that the humanity of the people being studied is lost by the end of the process. One does not believe that this is an inevitable consequence of scientific study but the consequence of a particular philosophy of science that assumes that the only true science exalts quantification as the sole standard of scientific value and invariably reduces the object of study to nothing but numbers. This misconception is perhaps especially unfortunate in the study of industrial workers. Many scholars who specialize in industrial sociology chose to study workers because working life is such a fascinating time of life, and workers are such interesting to as they set goals and attempt to achieve within the constraints imposed on them by their industries or workplace and the larger society. Indeed workers are lively people. Yet, it is hard to find evidence of that fascination and liveliness in reading research findings on workers produced by some scholars and students of industrial sociology in many Nigerian universities. Workers voices in some of the research findings are missing; reducing them to mere numbers effectively silences them and drains them of what makes them most interesting and human.

As social science research advances particularly labour research, one expects to see studies on labour and workers that is distinctively original, compelling, and creative that combine quantitative and qualitative methods. Both quantitative and qualitative research approaches have their strengths and weaknesses as mentioned earlier.

Quantitative approaches yield numerical data that can be used to describe patterns for large numbers of people but do not reflect the distinctiveness of individual experience. Qualitative approaches provide a vivid sense of individual experience but are more difficult to generalize to a larger

population. One may like to think of quantitative data as the bones and qualitative methods as the flesh. Both are required to make workers human beings.

It is important to note that this does not mean that every study on labour or industrial workers must strictly have both quantitative and qualitative data. One wishes to see research design and research findings that combine the strengths of the two approaches in a robust way. However, one may be fascinated if a study strictly adopted quantitative approach if such a study is exceptionally original or addresses an important but overlooked topic in labour study or industrial sociology. In the same way, a study can be fascinating if it is strictly qualitative study that is done in systematic manner and provides an especially vivid and insightful view of workers' experiences. Industrial sociologists construct a portrayal of a whole experience of a typical Nigerian worker through a combination of methods and studies. Each method provides one compelling part of this portrayal.

When research is purely quantitative, vitality may be lacking. Research on labour and industrial workers especially should reflect true lives of workers. Such research should be lively, diverse and vibrant as workers are. There are three aspects to vitality criterion. First, whenever possible, studies should include the actual voices of workers through qualitative methods. One of the hallmarks of working life is that there is an advance in the capacity for self reflection and this makes it especially appropriate and important for research to depict what workers say about their own experience, behaviour and relationship with others in the work organisations. This is by no mean a call to abandon rigour for triangulating methods with voices of workers so that the findings that would be made at the end of the study would possess scientific credibility as well as vitality.

The second aspect of the vitality criterion is that research should include a socio-cultural and economic context. Many researches on labour in Nigeria usually follow Anglo-America style but draw conclusions about workers in general, with no mention of cultural context or the socio-economic milieu of the research setting as if workers anywhere are like workers everywhere. However, there is a growing awareness among scholars on labour that behaviour of industrial workers in the current regime of pseudo democratic arrangement and neo-liberal policies in Nigeria can only be understood in the context of culture and socio-economic and political arrangement that shape their attitude and behaviour at work. Providing cultural, socio-economic and

political context is crucial to portraying the vitality of workers because this context is the framework for their thoughts, beliefs, behaviour and attitude.

The third aspect of the vitality criterion is that scholars should describe their research in a way that is lively, insightful, and even eloquent. It is a misguided view of science to think that a research must be dry, ponderous, and stilted in order to be legitimately “scientific.” Presenting findings on workers in this way does not make them more scientific; it only makes them boring. Especially in the discussion section, industrial sociologists should think creatively and use the results as a springboard for thoughtful and insightful reflections on the conditions of workers in the hands of exploitative management and the state that ever seeks to subjugate workers to its whims and caprices at all cost. Labour research scholars should not only let the data speak for itself or assume that the numbers (or even the voices alone) can tell the whole story. They should use the discussion as an opportunity to tell what they really think, based on what they have investigated.

Conclusion

From the foregoing, in as much as triangulation is used in labour studies to enrich understanding of an experience on labour issues through robust data and analysis, extension of knowledge or by initiating new ways of thinking about the subject of investigation, triangulations are inherently neither more or less valid than specific approaches to research. As with any research, validity stems more from appropriateness, thoroughness, and effectiveness with which those methods are applied (Bazeley, 2004). The use of triangulated methods in labour studies to produce robust data and result cannot be over emphasized.

Global international practices and scholarship demand that social science researchers should be dynamic in their approach to studying social issues and social realities. This much is desired in Nigeria and by extension the African continent where labour has been bogged down with a number of workplaces issues, infrastructural challenges, and debilitating and dehumanizing neo-liberal policies of national governments thus making them to look as pawns in the global capitalist chessboard. Thus triangulating research methods in labour studies are necessary for clear understanding of the working and living condition of Nigeria and African workers, as some labour researchers have done; it will assist not only in decolonizing knowledge but will also provide a frocentric view of these workers with vitality.

References

- Adenugba, A. A. (2006). *Globalisation and the Nigerian Labour Congress (NLC)*. Unpublished Ph.D. thesis submitted to the Department of Sociology, University of Ibadan, Nigeria.
- Akinwale, A. A. (2009). *Intrapreneurial Behaviour of Vocational Trainees in Furniture and Tailoring Workshops in Lagos State, Nigeria*. Unpublished Ph.D thesis submitted to the Department of Sociology, University of Ibadan, Ibadan, Nigeria.
- Babbie, E. (1989). *The Practice of Social Research*. Belmont, CA: Wadsworth.
- Bamiro, O. A., Oluleye, A.E. & Tiamiyu, M. A. (2006). 'Use of computers and internet for Research Purposes' In Olayinka, A.I., Taiwo, V.O.,Raji-Oyalade, A. & Farai, I.P. (ed.) *Methodology of Basic and Applied Research*. Ibadan: Postgraduate School, University of Ibadan. pp.215- 233.
- Bazeley, P. (2004). 'Issues in Mixing Qualitative and Quantitative Approaches in Research' In Buber, R., Gadner, J. & Richards, L. (eds.) *Applying qualitative methods to marketing management research*. UK: Palgrave Macmillan. Pp 141-156.
- Bryman, A. (1996). *Quantity and Quality Social Research*. London: Routledge.
- Creswell, J. W. (2002). *Research Design: qualitative, quantitative, and mixed approaches*. London: Sage: Publications.
- Denzin, N. K. (1970). *The Research Act*. Chicago: Aldine
- Denzin, N. K. (1978). *The Research Act* (2nd ed) New York: McGraw-Hill
- Denzin, N. K. (1989). *The Research Act* (3rd ed) Englewood Cliff. NJ, Prentice Hall.
- Denzin, N. K. & Lincoln, Y.S. (1994). *Handbook of qualitative research*. Thousand Oaks, CA : Sage.
- Ekhaguere, G., Olayinka, A., Taiwo, V., Alonge, T. & Obono, O (2006). 'Challenges of conducting Rearsch in Developing Countries' In Olayinka, A.I., Taiwo, V.O.,Raji-Oyalade, A. & Farai, I.P. (ed)

Methodology of Basic and Applied Research. Ibadan: Postgraduate School, University of Ibadan. pp.321-334.

- Flick, U. (1992). 'Triangulation revisited: Strategy of validation or alternative?' *Journal for the Theory of Social behaviour* 22: 175-197
- Frankfort-Nachmias, C. & Nachmias, D. (1996). *Research methods in the Social Sciences*. London: Arnold.
- Hughes, J.A., Sharrock, W.W. Martins, P. (2003). *Understanding classical sociology: Marx, Weber, Durkhiem*. London: Thousand Oaks, CA: Sage Publications.
- Isiugo-Abanihe, U.C. (2002). 'Qualitative research techniques' In Isiugo-Abanihe, Isamah, A.N. & Adesina, J.O. (ed) *Currents and Perspectives in Sociology*. Lagos: Malthouse. pp-. 52-72.
- Isiugo-Abanihe, U.C. & Obono, O. M. (2002) 'The use of focus groups discussions' In Isiugo-Abanihe, Isamah, A.N. & Adesina, J.O. (ed.) *Currents and Perspectives in Sociology*. Lagos: Malthouse. pp. 73-90.
- Jegede, A. S. (2006) 'Analysis of Qualitative data' In Olayinka, A. I., Taiwo, V.O., Raji-Oyalade, A. & Farai, I.P. (ed) *Methodology of Basic and Applied Research*. Ibadan: Postgraduate School, University of Ibadan. Pp.113-132.
- Nwachukwu, C.C. (1988) *Management: Theory and Practice*. Onitsha: Africana-FEP Publishers Limited.
- Obono, O., Arowojolu, A., Ajuwon, J., Ogundipe, G. A., Yakubu, J. A. & Falusi, A. G. (2006) 'Ethics in Research' In Olayinka, A.I., Taiwo, V.O., Raji-Oyalade, A. & Farai, I.P. (ed.) *Methodology of Basic and Applied Research*. Ibadan: Postgraduate School, University of Ibadan. pp.281-320.
- Ogunbameru, O. A. (2004). *Research methods in Social Science* (2nd ed). Oslo: D-Net Communications.
- Olsen, W. (2004). 'Triangulation in Social Research: Quantitative and Qualitative methods can really be mixed' In Holborn, M. (ed.) *Developments in Sociology*. Ormskirk: Causeway Press.

- Okafor, E. E. (1998). *Workers' Adaptation and Work Commitment under Structural Adjustment: A study in Lagos, Nigeria*. Unpublished Ph.D. thesis submitted to the Department of Sociology, University of Ibadan, Nigeria.
- Okafor, E. E. (2005) Definition and Scope of Sociology, in Balogun, S.K. and Taiwo, A.O. (eds.) *Introduction to Basic Concepts in Government, Society and Economy*. Ibadan: GSP, University of Ibadan pp. 61-74
- Okakwu, K. N. (2005) 'Basic Methods of data Collection and Analysis in sociology' In Balogun, S.K& Taiwo, A.O, (ed) *Introduction to Basic Concepts in Government, Society and Economy*. Ibadan: GSP, University of Ibadan. pp. 85-94.
- Okoh, A. O. (1998) *Personnel and Human Resource Management in Nigeria*. Lagos: Amfitop.
- Onyeonoru, I.P. (2004). 'Globalisation and Trade Union Resistance', *African Journal of Psychological Study of Social Issues* 7 (1): 45-50.
- Osiki, J. O. (2006). 'Use of Research Questionnaire' In Olayinka, A.I., Taiwo, V. O. Raji-Oyalade, A. & Farai, I.P. (ed.) *Methodology of Basic and Applied Research*. Ibadan: Postgraduate School, University of Ibadan. pp.113-132.
- Scrimshaw, S.C.M. (1991) 'Combining quantitative and qualitative methods in the study of intra-household resource allocation' In Cleland, J. & Hill, A.G (ed.) *The Health Transition: Methods and Measures*. Canberra: The Australian National University.
- Tashakkori, A. & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.